

FIG. 72




16		John Smith	
Pump 1	Pump 2	Pump 3	
<div> <div>Rate mL/h</div> <div>Volume Remaining mL</div> </div>	<div> <div>Rate mL/h</div> <div>Volume Remaining mL</div> </div>	<div> <div>Rate mL/h</div> <div>Volume Remaining mL</div> </div>	
<div> <div>  <div> <div>22.5</div> <div>Dopamine</div> <div>5mcg/kg/min</div> </div> </div> <div> <div>6.0</div> <div>Nitroglycerin</div> <div>20mcg/min</div> </div> <div> <div>5.0</div> <div>Maintenance</div> </div> </div>	<div> <div>  <div> <div>18.0</div> <div>Dobutamine</div> <div>5mcg/kg/min</div> </div> </div> <div> <div>13:54 h:min</div> <div>Time Remaining</div> </div> </div>	<div> <div>  <div> <div>10.0</div> <div>Heparin</div> <div>1000units/hr</div> </div> </div> <div> <div>13:54 h:min</div> <div>Time Remaining</div> </div> </div>	<div> <div>135.4</div> <div>243.7</div> <div>135.4</div> </div>
<div>Setup</div>		<div>Close</div>	

FIG. 74






16		John Smith	
Pump 1	Pump 2	ALARM	Pump 3
<div>Rate mL/h</div> <div>Volume Remaining mL</div>	<div>Rate mL/h</div> <div>Volume Remaining mL</div>		<div>Rate mL/h</div> <div>Volume Remaining mL</div>
<div>  22.5 249.0 Dopamine 5mcg/kg/min </div>	<div>  18.0 243.7 Dobutamine 5mcg/kg/min </div>		<div>  10.0 135.4 Heparin 1000units/hr </div>
<div>  6.0 75.0 Nitroglycerin 20mcg/min </div>	<div> Time Remaining 13:54 h:min </div>		<div> Time Remaining 13:54 h:min </div>
<div>  5.0 35.6 Maintenance </div>			
<div>Setup</div>		<div>Close</div>	
<div>Pump: Air</div>			

FIG. 75

	Total Administrations	Total Wrong	Near Miss						Med Error
			# Wrong Drug	# Wrong Patient	# Wrong Time	# Wrong Route	# Wrong Dose	# Wrong Dose	
All Units	Total	750	198	41	25	77	6	20	29
	Infusion	350	66	20	0	20	6	20	0
	Non-Infusion	400	107	21	0	57	0	0	29
BCPS Demo Unit	Total	450	102	24	12	48	3	20	7
	Infusion	200	36	11	0	10	3	12	0
	Non-Infusion	250	58	13	0	38	0	0	7
BPCS Demo Unit2	Total	300	71	17	13	29	3	0	22
	Infusion	150	21	5	0	6	2	8	0
	Non-Infusion	150	49	8	0	19	0	0	22

Fig. 76

	Total Administrations	Total Wrong	Near Miss						Med Error
			# Wrong Drug	# Wrong Patient	# Wrong Time	# Wrong Route	# Wrong Dose	# Wrong Dose	
Total	450	106	24	12	48	3	12	7	
Infusion	200	36	11	0	10	3	12	0	
Non-Infusion	250	58	13	0	38	0	0	7	

Fig. 77

Near Miss Summary by Med All Units
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM

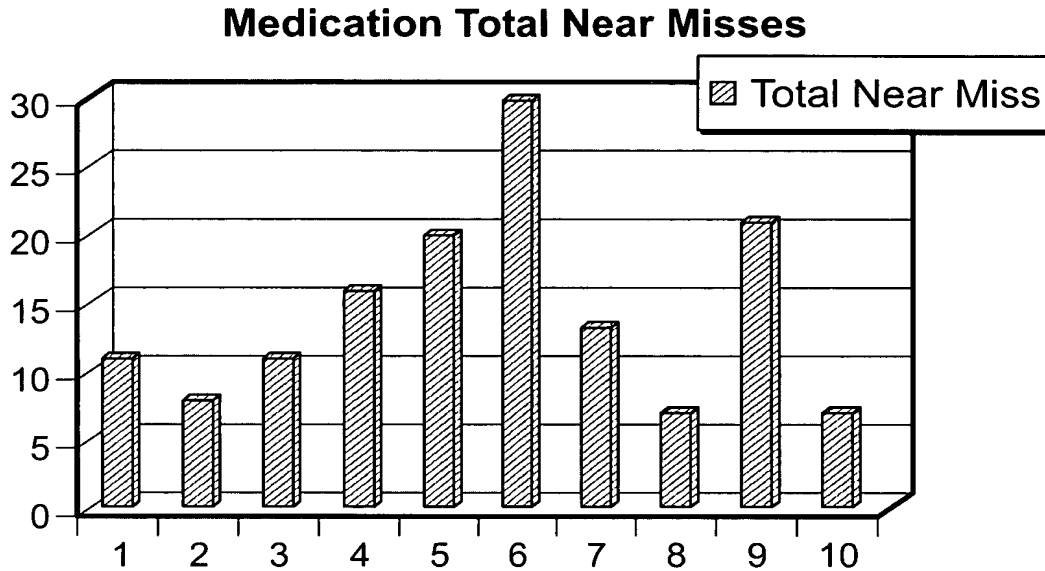


FIG. 78

Near Miss Unit Summary by Med BPCS Demo Unit
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM

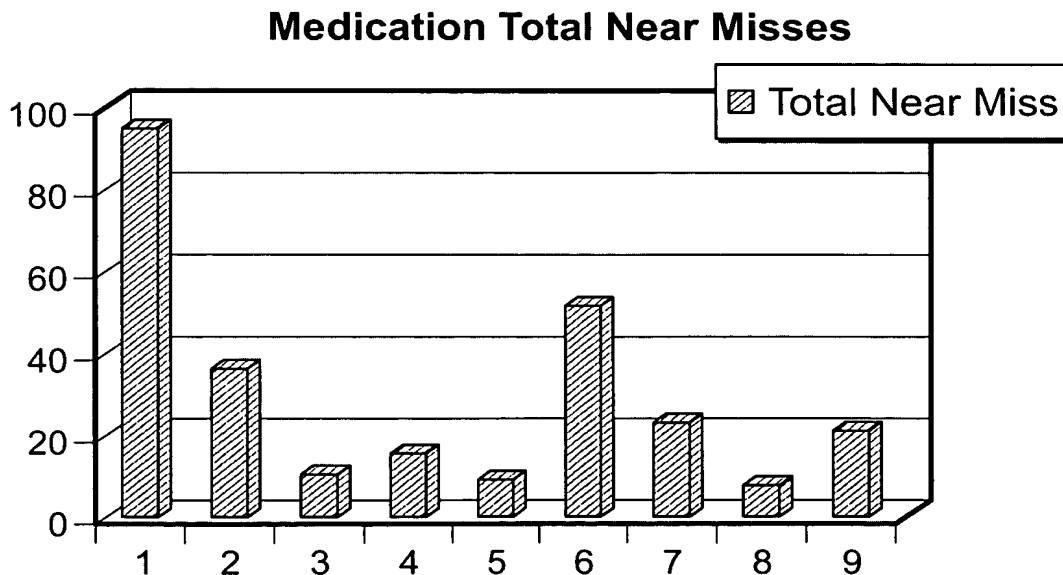


FIG. 80

All Units	Total Administrations	Total Wrong	Near Miss				Med Error
			# Wrong Drug	# Wrong Time	# Wrong Route	# Wrong Dose	
Total	750	173	41	77	6	20	29
Infusions	350	66	20	20	6	20	0
1. Bel's Morphine Sulfat Inj 2 MG/ML	25	11	4	4	1	2	0
2. Continuous Titration	70	8	3	2	0	3	0
3. Multiple Vitamin Inj.	95	11	1	3	2	5	0
4. Tapering	60	16	7	3	0	6	0
5. TPN	100	20	5	8	3	4	0
Non-Infusions	400	107	21	57	0	0	29
6. Acetaminophen 500	125	48	5	25	0	0	18
7. Lorazepam Tab 1 MG	100	19	3	10	0	0	6
8. Hydrocortisone Cream 2.5%	50	9	4	3	0	0	2
9. Insulin Regular (Human) Inj 100 U/ML	100	21	6	15	0	0	0
10. Xylol Liq.	25	10	3	4	0	0	3
Total	450	102	24	48	3	20	7
Infusions	200	36	11	10	3	12	0
Multiple Vitamin Inj	95	11	1	3	2	5	0
Tapering	60	16	7	3	0	6	0
TPN	45	9	3	4	1	1	0
Non-Infusions	250	58	13	38	0	0	7
Acetaminophen 500	100	28	3	20	0	0	5
Hydrocortisone Cream 2.5%	50	9	4	3	0	0	2
Insulin Regular (Human) Inj 100 U/ML	100	21	6	15	0	0	0
Total	300	71	17	29	3	0	22
Infusions	150	21	5	6	2	8	0
Bel's Morphine Sulfate Inj 2 MG/ML	25	11	4	4	1	2	0
Continuous Titration	70	8	3	2	0	3	0
TPN	55	11	2	4	2	3	0
Non-Infusions	150	49	8	19	0	0	22

FIG. 79

			Near Miss					Med Error
	Total Administrations	Total Wrong	# Wrong Drug	# Wrong Time	# Wrong Route	# Wrong Rate	# Wrong Dose	
1. Total	450	102	24	48	3	20	7	
2. Infusions	200	36	11	10	3	12	0	
3. Multiple Vitamin Inj.	95	11	1	3	2	5	0	
4. Tapering	60	16	7	3	0	6	0	
5. TPN	45	9	3	4	1	1	0	
6. Non-Infusions	250	58	13	38	0	0	7	
7. Acetaminophen 500	100	28	3	20	0	0	5	
8. Hydrocortisone Cream 2.5%	50	9	4	3	0	0	2	
9. Insulin Regular (Human) Inj 100 U/ML	100	21	6	15	0	0	0	

FIG. 81

Scan Errors

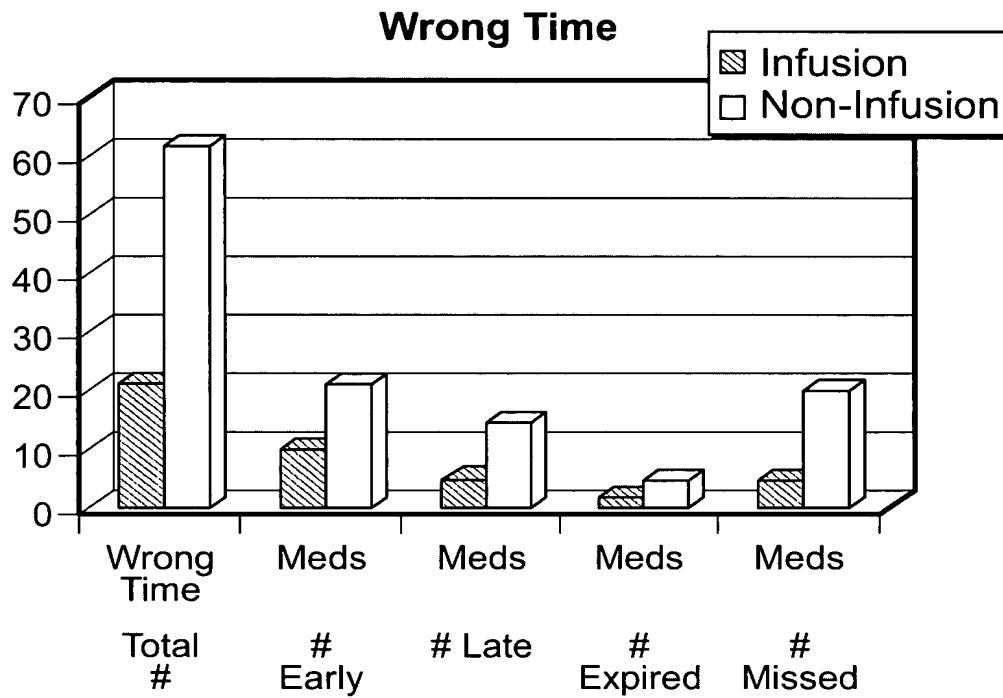
Group = Nurse – Hand Held (Hand Held)					QA Test Hospital
Personnel: Andr., Andr					
Nurse – CPOE (CPOE)					
Nurse – Hand Held (Hand Held)					
Nurse – Inpatient (Inpatient)					
Nurse – Lifeline (Lifeline)					
Time	System/Screen	Scan Error (Type/Error)	Expected	Actual	
06-Nov-2003 (Thursday)					
15:37	Autros Hand Held /Handheld/eMar/EnterDrugQuantity.aspx	Item Scan ID Scanned barcode is invalid or inactive	102 Captopril Tab 50 MG CAPOTEN	106 Acetaminophen Soln 100 MG/ML ACETAMINOPHEN	
24-Nov-2003 (Monday)					
13:31	Autros Hand Held /Handheld/Shift/ShiftSelectPatients.aspx	Patient Locator Scanned Barcode is invalid or inactive.		q	
28-Nov-2003 (Friday)					
15:33	Autros Hand Held /Handheld/MixOnFloor/MixOnFloor/Gettle	Item Scan ID Scanned barcode is invalid or inactive.	106 Acetaminophen Soln 100 MG/ML ACETAMINOPHEN	409 Cefazolin Sodium for Inj 10 GM LF CEFAZOLIN SODIUM	
28-Nov-2003 (Friday)					
15:36	Autros Hand Held /Handheld/eMar/ScanIVBagForAdmin.as	Item Scan ID Scanned barcode is invalid or inactive.	8800006940	8800006940	
15:39	Autros Hand Held /Handheld/eMar/ScanIVBagForAdmin.as	Item Scan ID Scanned barcode is invalid or inactive.	8800006941	88000006941	
15:41	Autros Hand Held /Handheld/StopInfusion/StoppedInfusion	Item Scan ID Scanned barcode is invalid or inactive.	One of IV Bag IDs	88000006941	
05-Jan-2004 (Monday)					
11:19	Autros Hand Held /Handheld/Shift/ShiftSelectPatients.aspx	Patient Locator Scanned barcode is invalid or inactive.		qa998	
21-Jan-2004 (Wednesday)					
15:17	Autros Hand Held /Handheld/eMar/ScanIVBagForAdmin.as	Item Scan ID Scanned barcode is invalid or inactive.	8800011408	8800011168	
03-Feb-2004 (Tuesday)					
16:20	Autros Hand Held /Handheld/eMar/EnterDrugQuantity.aspx	Item Scan ID Scanned barcode is invalid or inactive.	11 Alprazolam Tab 2 MG(Bel) 102 Captopril Tab 50 MG ALPRAZOLAM (Bel) CAPOTEN		
16:20	Autros Hand Held /Handheld/eMar/EnterDrugQuantity.aspx	Item Scan ID Scanned barcode is invalid or inactive.	11 Alprazolam Tab 2 MG(Bel) 9 ALPRAZOLAM (Bel)		
					Number of Errors: 10

FIG. 82

Selection Criteria	
<input checked="" type="checkbox"/> OK <input type="checkbox"/> Cancel	
<div>Created Date</div> <div>Start: 15 MAR 2004 10:58 <input type="button" value="ON"/> <input type="button" value="OFF"/></div> <div>End: 15 MAR 2004 10:58 <input type="button" value="ON"/> <input type="button" value="OFF"/></div>	<div>Screen</div> <div>Click listbox for values</div>
	<div>Barcode Type</div> <div>Click listbox for values</div>
<div>User Group</div> <div>ARS Client (ARS Client) Charge Nurse (Hand Held) Database Administrator (Autros Maintenance) HL7Engine (HL7 Interface) Nurse - CPOE (CPOE) Nurse - Hand Held (Hand Held) Nurse - Inpatient (Inpatient) Nurse Lifeline (Lifeline) Pharmacist - CPOE (CPOE) Pharmacist - Hand Held (Hand Held) Pharmacist - Inpatient (Inpatient) Pharmacist - Lifeline (Lifeline) Physician - CPOE (CPOE)</div>	<div>User</div> <div></div>

FIG. 83

Near Miss Wrong Time Summary All Units
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM



Total Administrations: 546

FIG. 84

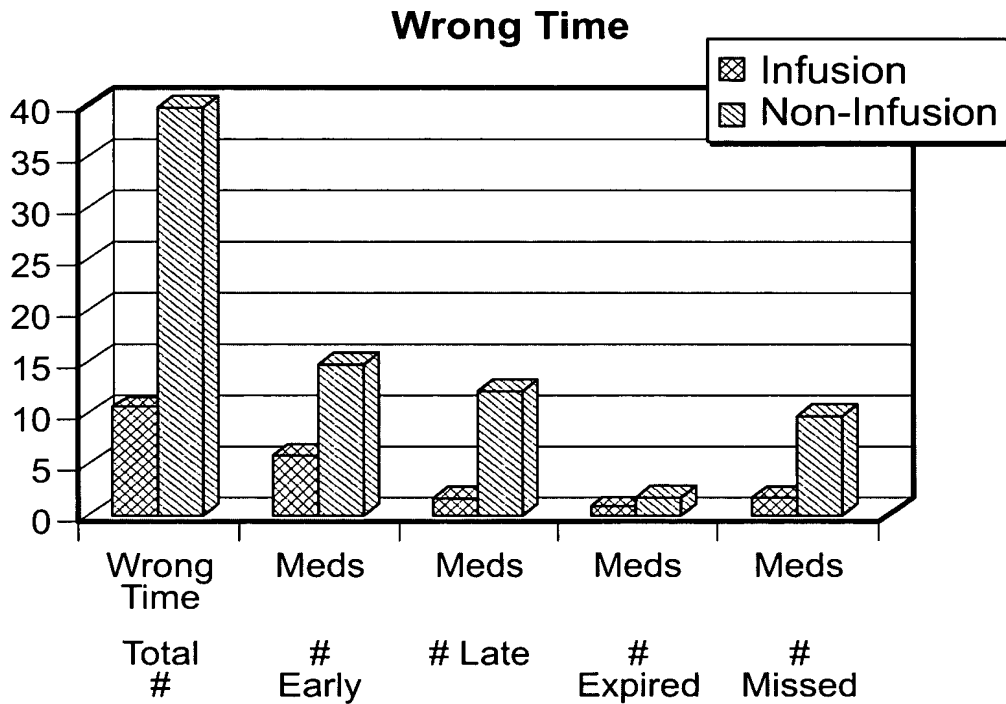
		Total # Wrong Time	# Early Meds	# Late Meds	# Expired Meds	# Missed Meds
All Units	Total	84	32	20	7	25
	Infusion	22	10	5	2	5
	Non-Infusion	62	22	15	5	20
BPCS Demo Unit	Total	51	21	15	3	12
	Infusion	11	6	2	1	2
	Non-Infusion	40	15	13	2	10
BPCS Demo Unit2	Total	33	11	5	4	13
	Infusion	11	4	3	1	3
	Non-Infusion	22	7	2	3	10

FIG. 85

	Total # Wrong Time	# Early Meds	# Late Meds	# Expired Meds	# Missed Meds
Total	51	21	15	3	12
Infusion	11	6	2	1	2
Non-Infusion	40	15	13	2	10

FIG. 87

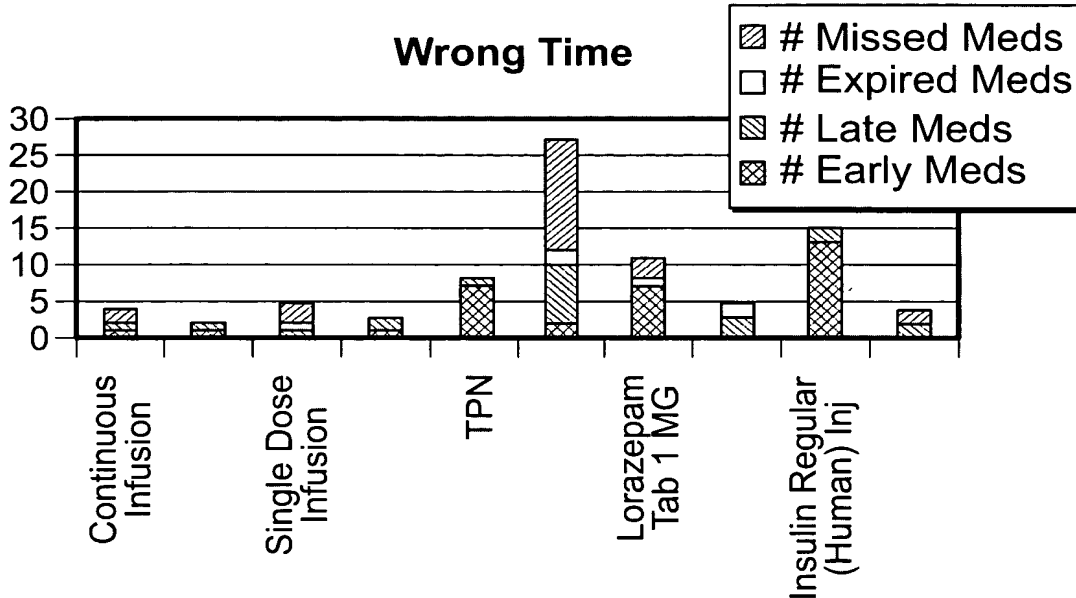
Near Miss Wrong Time Unit Summary BPCS Demo Unit
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM



Total Administrations: 160

FIG. 86

Wrong Time by Med All Units
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM



Total Administrations: 546

FIG. 88

Wrong Time by Med BPCS Demo Unit
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM

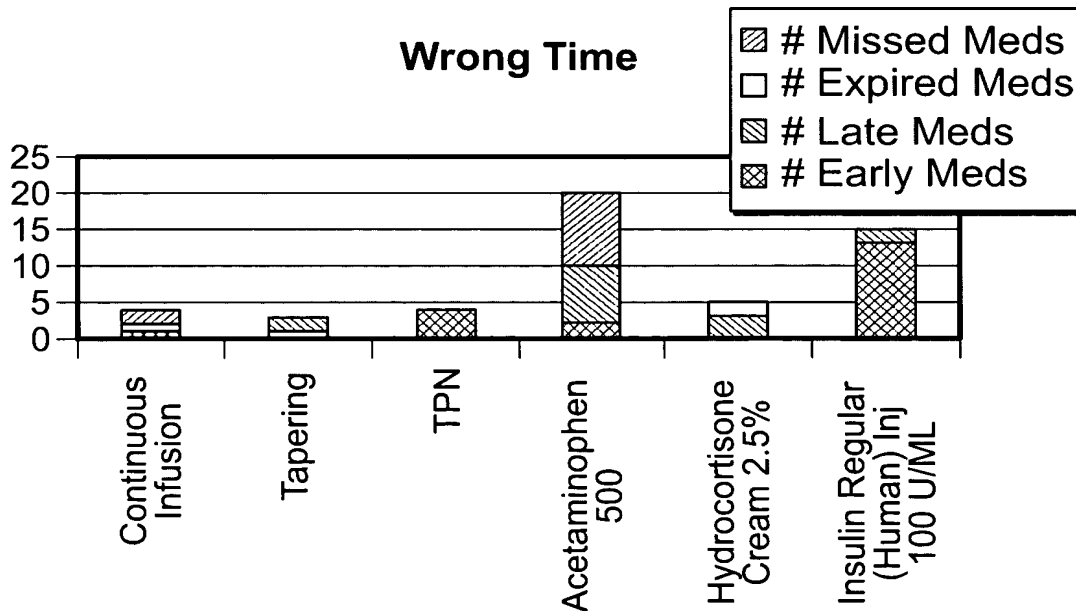


FIG. 90

All Units		Total # Wrong Time	# Early Meds	# Late Meds	# Expired Meds	# Missed Meds
All Units	Total	84	32	20	7	25
	Infusions	22	10	5	2	5
	Continuous Infusion	4	1	0	1	2
	Continuous Titration	2	1	1	0	0
	Single Dose Infusion	5	0	1	1	3
	Tapering	3	1	2	0	0
	TPN	8	7	1	0	0
	Non-Infusions	62	22	15	5	20
	Acetaminophen 500	27	2	8	2	15
	Lorazepam Tab 1 MG	11	7	0	1	3
	Hydrocortisone Cream 2.5%	5	0	3	2	0
	Insulin Regular (Human) Inj 100 U/ML	15	13	2	0	0
	Xylol Liq	4	0	2	0	2
	Total	51	21	15	3	12
BPCS Demo Unit	Infusions	11	6	2	1	2
	Continuous Infusion	4	1	0	1	2
	Tapering	3	1	2	0	0
	TPN	4	4	0	0	0
	Non-Infusions	40	15	13	2	10
	Acetaminophen 500	20	2	8	0	10
	Hydrocortisone Cream 2.5%	5	0	3	2	0
	Insulin Regular (Human) Inj 100 U/ML	15	13	2	0	0
	Total	33	11	5	4	13
	Infusions	11	4	3	1	3
	Continuous Titration	2	1	1	0	0
	Single Dose Infusion	5	0	1	1	3
	TPN	4	3	1	0	0
	Non-Infusions	22	7	2	3	10
BPCS Demo Unit2	Acetaminophen 500	7	0	0	2	5
	Lorazepam Tab 1 MG	11	7	0	1	3
	Xylol Liq	4	0	2	0	2
	Total	4	0	2	0	2
	Infusions	11	4	3	1	3

FIG. 89

	Total # Wrong Time	# Early Meds	# Late Meds	# Expired Meds	# Missed Meds
Total	51	21	15	3	12
Infusions	11	6	2	1	2
Continuous Infusion	4	1	0	1	2
Tapering	3	1	2	0	0
TPN	4	4	0	0	0
Non-Infusions	40	15	13	2	10
Acetaminophen 500	20	2	8	0	10
Hydrocortisone Cream 2.5%	5	0	3	2	0
Insulin Regular (Human) Inj 100 U/ML	15	13	2	0	0

FIG. 91

Wrong Time with Reason Code Report

BPCS Demo Unit

Reason	Patient	RX	Order Admin Time	Admin Time	Nurse
Early Medication Administrations					
Acetaminophen As per MD	FTLOC1	1 CAP(s) Administered Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral New	03-Mar-2004 10:59	03-Mar-2004 09:22:14	NURSEB
	ETLOC1	1 CAP(s) Administered Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral New	04-Mar-2004 14:15	04-Mar-2004 13:05	CHNURSE
Total Early					2
Late Medication Administrations					
Acetaminophen Patient unavailable at scheduled time	pid04	1 CAP(s) Administered Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral New	03-Mar-2004 10:59	03-Mar-2004 11:22:14	NURSEA
	LZ001	1 CAP(s) Administered Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral New	04-Mar-2004 14:15	04-Mar-2004 15:35	CHNURSE
Multiple Vitamin Inj Patient unavailable at scheduled time	FTLOC1	Continuous Infusion *Multiple Vitamin Inj** 20 ML WR13_Water for IV Injection 2 L = 2000 ML Route: Intravenous Flow Rate: 250ML/H Estimated Administration Period: 8 Hours	03-Mar-2004 10:59	03-Mar-2004 11:22:14	NURSEB
Total Late					3
Expired Medication Administrations					
Acetaminophen Still Required	newp2	1 CAP(s) Administered Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral New	03-Mar-2004 10:59	03-Mar-2004 12:45-14	FNURSE
	Total Expired				1

FIG. 92

Missed Medication Administrations			
Acetaminophen			
newp2	1 CAP(s) Administered Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral New	03-Mar-2004 09:45	
FTLOC1	1 CAP(s) Administered Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral New	03-Mar-2004 13:00	
LZ001	1 CAP(s) Administered Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral New	03-Mar-2004 17:45	
Multiple Vitamin Inj			
ETLOC1	Continuous Infusion Simp Continuous Infusion *Multiple Vitamin Inj** 100 ML Route: Intravenous Flow Rate: 50ML/H Line: Lne3 Site: tail Estimated Administration Period: 2 Hours	03-Mar-2004 11:00	
ETLOC1	Continuous Infusion Simp Continuous Infusion *Multiple Vitamin Inj** 100 ML Route: Intravenous Flow Rate: 50ML/H Line: Lne3 Site: tail Estimated Administration Period: 2 Hours	03-Mar-2004 13:00	
Total Missed			5

FIG. 93

Infusion Flow Rate History

Run Period: from 8/14/2003 12:00:00AM to 3/2/2004 12:00:00AM

Unit		Occurrence Date	Pump Mode	Pump Status	Rate (mL/H)
AUTROS DEMO UNIT					
Patient Name		AUTROS.Pt1			
Nurse		Tech, Cori			
RX 197780		Continuous Infusion			
		*Multiple Vitamin Inj**			
		10 ML			
		Route: Injection Flow Rate: 10ML/H			
		Estimated Administration Period: 1 Hour			
751697		1/14/2004 1:10:58PM	Primary	Stopped	50.00
		1/14/2004 2:50:49PM	Primary	Stopped	0.00
		1/14/2004 2:51:04PM	Primary	Stopped	20.00
RX 199997		Continuous Infusion			
		*Multiple Vitamin Inj**			
		9999 ML			
		Route: Injection Flow Rate: 1200ML/H			
		Estimated Administration Period: 5 Hours			
		1/23/2004 2:08:40PM	Primary	Standby mode	100.00
		1/23/2004 2:08:49PM	Primary	Stopped	100.00
		1/23/2004 2:08:58PM	Primary	Stopped	52.00
		1/23/2004 2:11:36PM	Primary	Standby mode	52.00
		1/23/2004 2:32:30PM	Primary	Stopped	52.00
		1/23/2004 2:32:51PM	Primary	Stopped	555.00
		1/23/2004 2:34:06PM	Primary	Standby mode	555.00

FIG. 94

Colleague Infusion Rate and Mode Comparison Summary

All Units

Run Period: From 3/1/2004 12:00:00AM to 3/4/2004 12:00:00AM

	Total	# Matches	Rate			Mode
			# Resolved Mismatches	# Accepted Mismatches	# No Comparisons	# Mismatches
Total Infusions for All Units	114	62	20	20	32	28
Primary	62	35	13	14	13	11
Piggyback	52	27	7	6	19	17
BPCS Demo Unit Total Infusions	55	30	12	7	18	16
Primary	35	20	7	5	10	4
Piggyback	20	10	5	2	8	12
BPCS Demo Unit2 Total Infusions	59	32	8	13	14	12
Primary	27	15	6	9	3	7
Piggyback	32	17	2	4	11	5

FIG. 95

Colleague Infusion Rate and Mode Comparison Unit Summary

BPCS Demo Unit

Run Period: From 3/1/2004 12:00:00AM to 3/4/2004 12:00:00AM

	Total	# Matches	Rate			Mode
			# Resolved Mismatches	# Accepted Mismatches	# No Comparisons	# Mismatches
Total Infusions	55	30	12	7	18	16
Primary	35	20	7	5	10	4
Piggyback	20	10	5	2	8	12

FIG. 96

Infusion Flow Rate Comparison

Run Period: From 8/24/2003 12:00:00AM to 3/11/2004 12:00:00AM

Total	1. No Match	2. Match	3. No Comparison
35	5	2	28
*AUTROS Unit	5	2	28
DEMO UNIT*	5	2	28

FIG. 97

Colleague Infusion Rate Comparison Summary by Med

All Units

Run Period: From 3/1/2004 12:00:00AM to 3/4/2004 12:00:00AM

	Total Infusions	# Matches	Rate		
			# Resolved Mismatches	# Accepted Mismatches	# No Comparisons
All Units	Total	114	62	20	32
	Bel's Morphine Sulfate Inj 2MG/ML	14	7	1	3
	Continuous Titration	15	4	3	2
	Multi Vitamin Inj	17	6	4	4
	Tapering	42	30	7	3
	TPN	26	15	5	8
	Total	55	30	12	7
BPCS Demo Unit	Total	14	7	1	3
	Bel's Morphine Sulfate Inj 2MG/ML	42	30	7	3
	Tapering	18	10	2	4
	TPN	59	32	8	13
BPCS Demo Unit2	Total	15	4	3	2
	Continuous Titration	17	6	4	4
	Multi Vitamin Inj	20	5	3	4
	TPN				1

FIG. 98

Colleague Infusion Rate Comparison Summary by Med

BCPS Demo Unit

Run Period: From 3/1/2004 12:00:00AM to 3/4/2004 12:00:00AM

	Total Infusions	Rate			
		# Matches	# Resolved Mismatches	# Accepted Mismatches	# No Comparisons
Total	55	30	12	7	18
Bel's Morphine Sulfate Inj 2MG/ML	14	7	1	3	4
Tapering	42	30	7	3	9
TPN	18	10	2	4	2

FIG. 99

Infusion Flow Rate Comparison

Run Period: From 8/24/2003 12:00:00AM to 3/11/2004 12:00:00AM

		Total	1. No Match	2. Match	3. No Comparison
Total		35	5	2	28
AUTROS DEMO UNIT	Unit	35	5	2	28
	Primary	35	5	2	28

			Total	1. No Match	2. Match	3. No Comparison
Total			35	5	2	28
AUTROS DEMO UNIT	Unit Total:		35	5	2	28
	Continuous Infusion *Multiple Vitamin Inj** 10 ML Route: Injection Flow	Total	15	5	1	9
		Primary	15	5	1	9
	Continuous Infusion *Multiple Vitamin Inj** 10 ML Route: Intramuscular	Total	3	0	0	3
		Primary	3	0	0	3
	Continuous Infusion *Multiple Vitamin Inj** 9999 ML Route: Injection Flow	Total	7	0	0	7
		Primary	7	0	0	7
	Continuous Infusion Morphine Sulfate Inj 15	Total	5	0	1	4
		Primary	5	0	1	4
	Continuous Infusion Morphine Sulfate Inj 15 MG/ML 45 MG = 9 ML	Total	5	0	1	4
		Primary	5	0	1	4
	Continuous Infusion Morphine Sulfate Inj 15 MG/ML *short 10 G = 0.667 ML	Total	2	0	0	2
		Primary	2	0	0	2
	Continuous Infusion Morphine Sulfate Inj 15 MG/ML *short 10 G = 0.667 ML	Total	3	0	0	3
		Primary	3	0	0	3

FIG. 100

Infusion Flow Rate Comparison
Run Period: From 8/14/2003 12:00:00AM to 3/1/2004 12:00:00AM

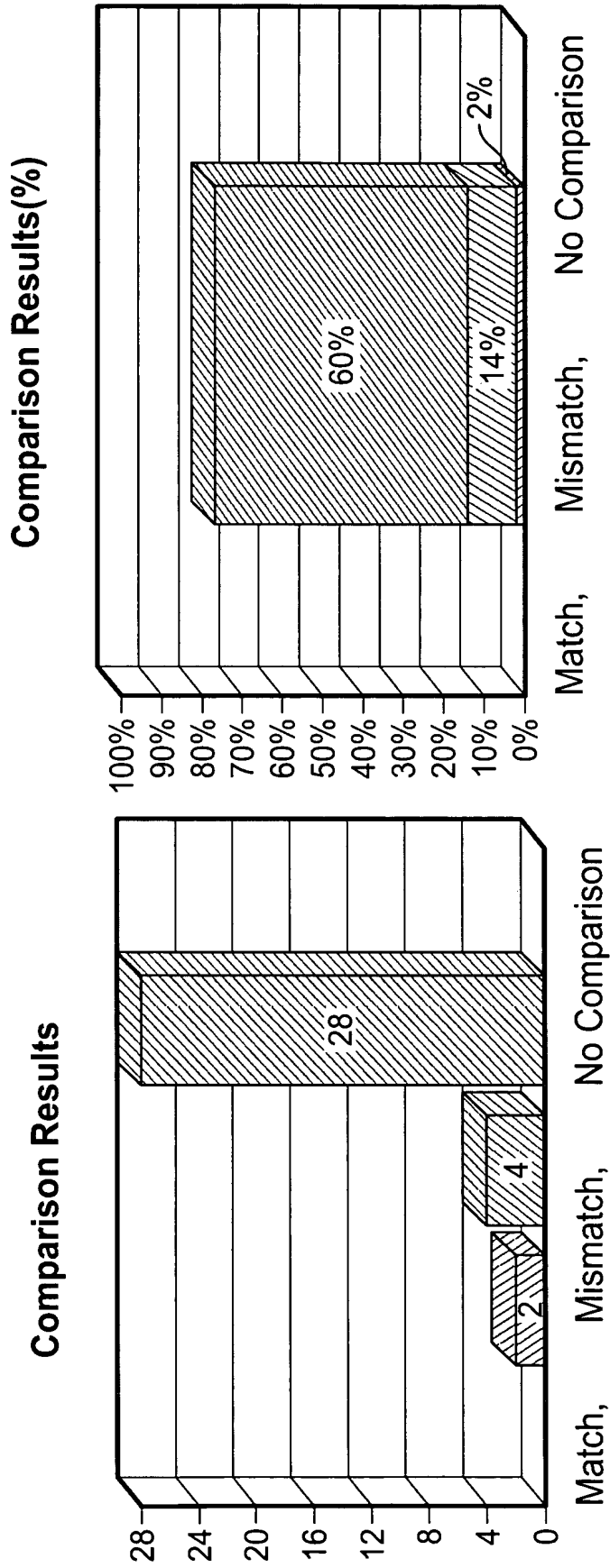


FIG. 101

Unit	Pump Mode	Rx Rate	Pump Rate	Comparison Result	Date/Time
781396	*AUTROS DEMO UNIT* Nurse: Nurse, Mary Patient: Palm, Father Rx 206180 Continuous Infusion *Multiple Vitamin Inj** 10 ML Route: Intramuscular Flow Rate: 10 ML/H Estimated Administration Period: 1 Hour				
	Primary		555	No Comparison	2/10/2004 10:57:23AM
	RX 206180		Continuous Infusion *Multiple Vitamin Inj** 10 ML Route: Intramuscular Flow Rate: 10 ML/H Estimated Administration Period: 1 Hour		
781396	Continuous Infusion *Multiple Vitamin Inj** 10 ML Route: Intramuscular Flow Rate: 10 ML/H Estimated Administration Period: 1 Hour				
	Primary		555	No Comparison	2/10/2004 11:41:02AM
	RX 206180		Continuous Infusion *Multiple Vitamin Inj** 10 ML Route: Intramuscular Flow Rate: 10 ML/H Estimated Administration Period: 1 Hour		
781397	Patient: AUTROS, Ptl RX 205182 Continuous Infusion Morphine Sulfate Inj 15 MG/ML *short 10 GM = 0.667 ML To be Administered Over 10 Minutes Route: Injection Estimated Flow Route: 4 ML/H				
	Primary		555	No Comparison	2/10/2004 11:58:06AM
	RX 205182		Continuous Infusion Morphine Sulfate Inj 15 MG/ML *short 10 GM = 0.667 ML To be Administered Over 10 Minutes Route: Injection Estimated Flow Route: 4 ML/H		
776327	Primary		555	No Comparison	2/6/2004 10:55:19AM
	Primary		555	No Comparison	2/6/2004 10:55:22AM
Nurse: Tech, Cori Patient: AUTROS, Ptl					

FIG. 102

Colleague Guardian Dose/Rate Range Out of Limit Summary All Units
Run Period: From 3/1/2004 12:00:00AM to 3/4/2004 12:00:00AM

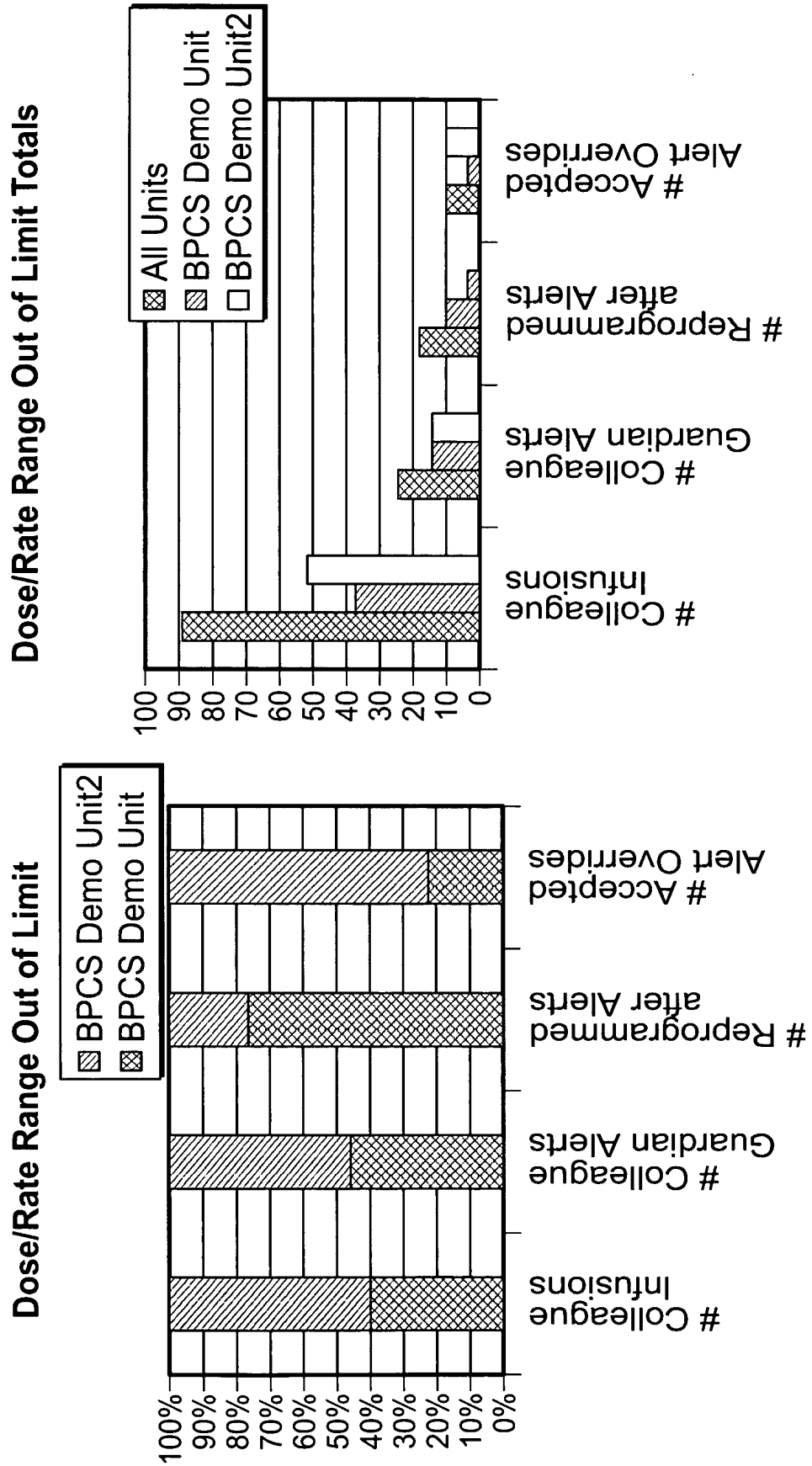


FIG. 103

	# Colleague Infusions	# Colleague Guardian Alerts	# Reprogrammed after Alerts	# Accepted Alert Overrides
All Units	89	25	15	10
BPCS Demo Unit	35	12	9	3
BPCS Demo Unit2	54	13	3	10

FIG. 104

	# Colleague Infusions	# Colleague Guardian Alerts	# Reprogrammed after Alert	# Accepted Alert Overrides
Total	12	9	3	3

FIG. 106

Colleague Guardian Dose/Rate Range Out of Limit Unit Summary BPCS Demo Unit
Run Period: From 3/1/2004 12:00:00AM to 3/4/2004 12:00:00AM

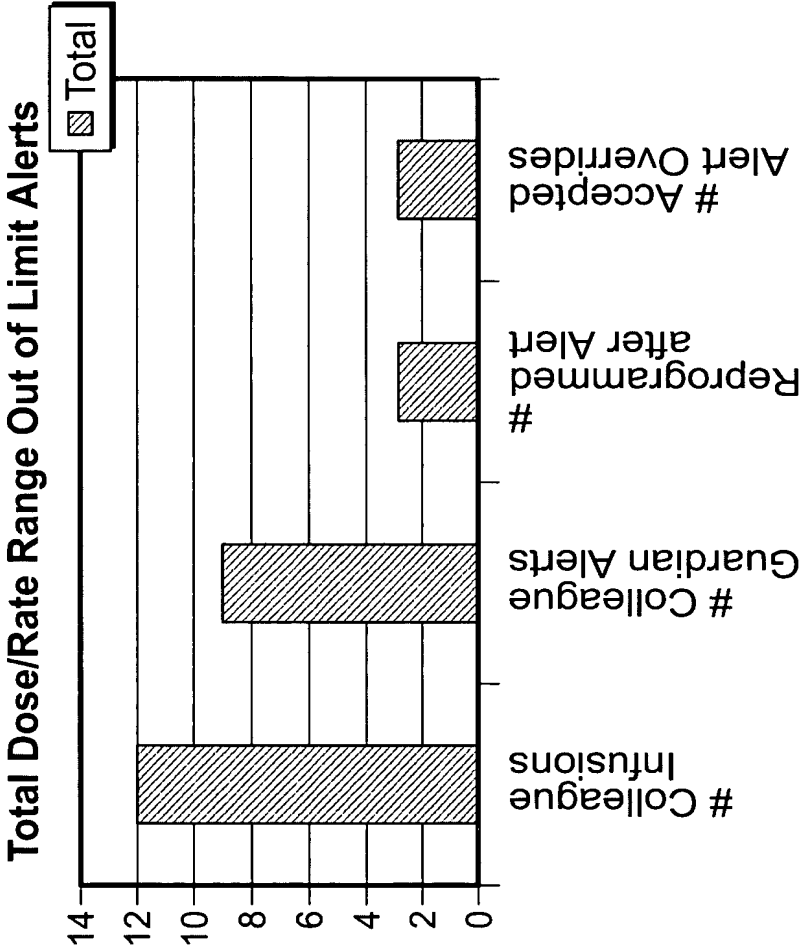


FIG. 105

Colleague Guardian Dose/Rate Range Out of Limit Unit Summary BPCS Demo Unit
Run Period: From 3/1/2004 12:00:00AM to 3/4/2004 12:00:00AM

Dose/Rate Range Out of Limits by Med
for BPCS Demo Unit

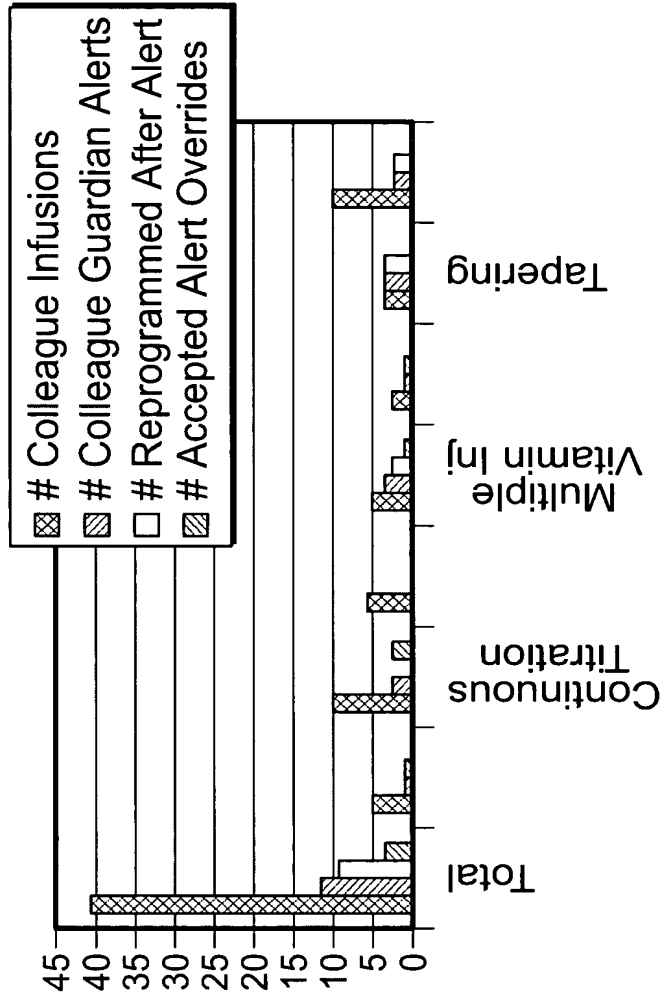


FIG. 107

Pharmacy Label	Colleague Guardian Label	# Colleague Infusions	# Colleague Guardian Alerts	# Reprogrammed after Alert	# Accepted Alert Overrides
Total		41	12	9	3
Bel's Morphine Sulfate Inj 2 MG/ML	MORPHINE	5	1	1	0
Continuous Titration	DOBUTAMN	10	2	0	2
Dopamine HCl Inj 40MG/ML		6	0	0	0
Multiple Vitamin Inj	ANTIBIOT	5	3	2	1
Tapering	DOPAMINE	2	1	1	0
Tapering	FLUORUOR	3	3	3	0
TPN	TPN	10	2	2	0

FIG. 108

Colleague Alarms/Alerts Summary All Units
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM

Total Alarms & KVO Alerts

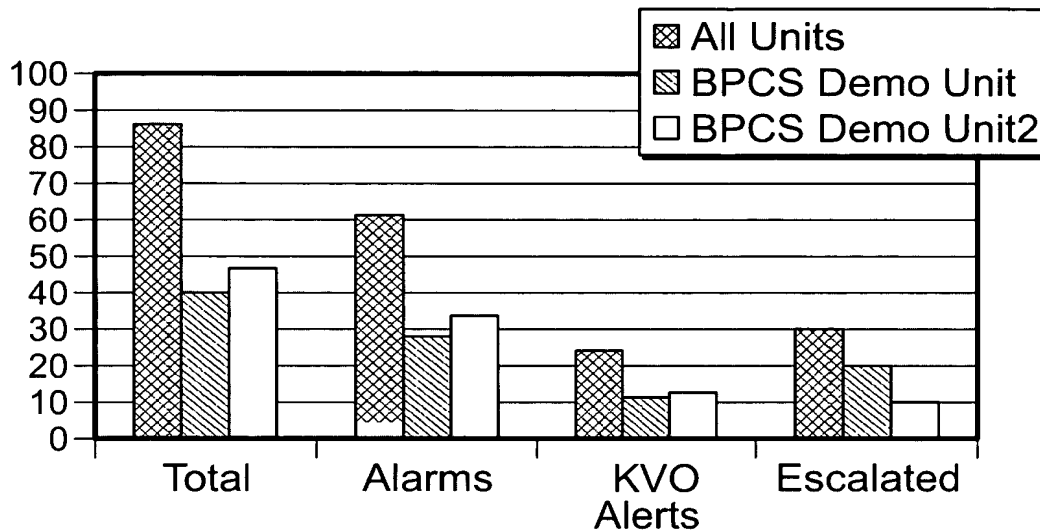


FIG. 109

Colleague Alarms/Alerts Summary BPCS Demo Unit
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM

Total Alarms/Alerts
for BPCS Demo Unit

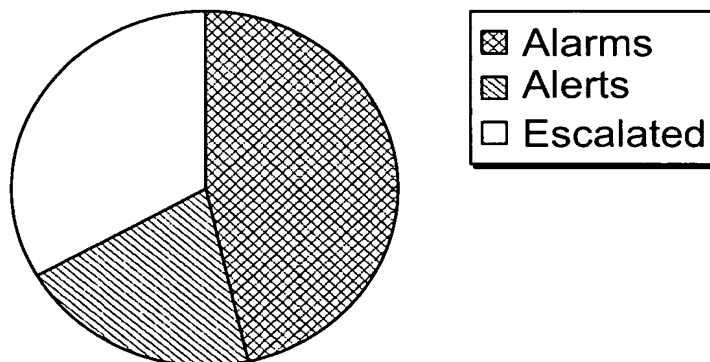


FIG. 111

	Total Infusions	Alarms/Alerts Total	# Alarms	# KVO Alerts	# Escalated	*Avg Time to Resolve (mm:ss)
All Units	50	87	62	25	30	2:23
BPCS Demo Unit	30	40	28	12	20	2:15
BPCS Demo Unit2	20	47	34	13	10	2:30

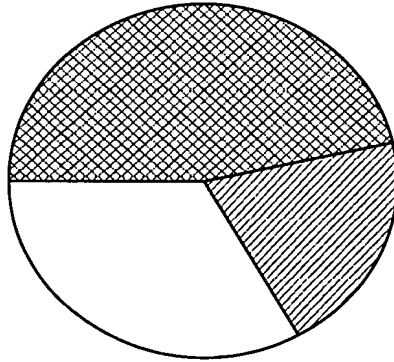
FIG. 110

Total	# Alarms	# KVO Alerts	# Escalated	*Avg Time to Resolve (mm:ss)
40	28	12	20	2:15

FIG. 112

Colleague Alarms/Alerts Summary by Alarm Condition BPCS Demo Unit
Run Period: From 3/1/2004 12:00:00AM to 3/4/2004 12:00:00AM

Total Alarms/Alerts
for BPCS Demo Unit



Total Infusions: 30

FIG. 113A

Total Alarms/Alert by Condition
for BPCS Demo Unit

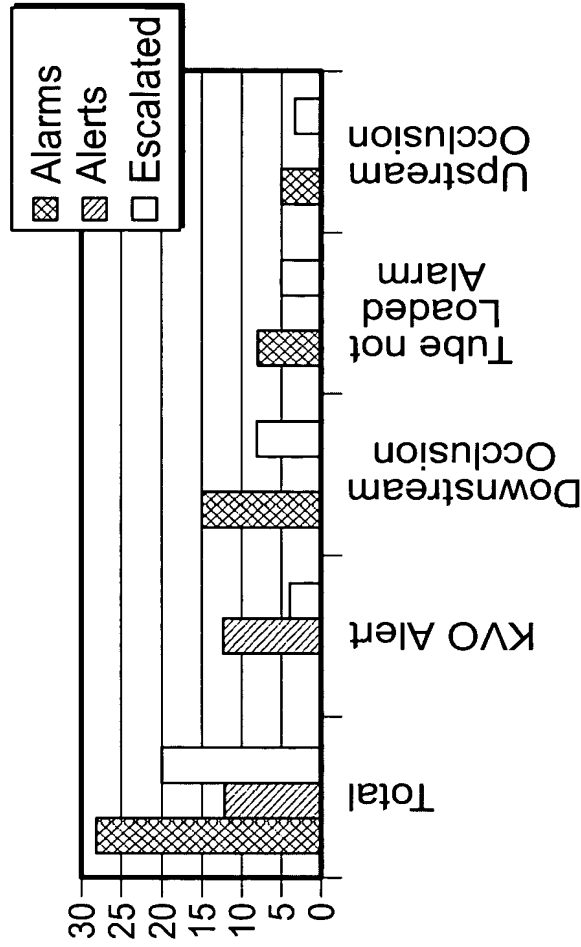


FIG. 113B

Total Infusions: 30

Alarm Condition	Total Alarms/Alerts	# Alarms	# KVO Alerts	# Escalated	Avg Time to Resolve (mm:ss)
Total	40	28	12	20	2:15
KVO Alert	12	0	12	4	0:45
Downstream Occlusion	15	15	0	8	3:45
Tube not Loaded Alarm	8	8	0	5	1:10
Upstream Occlusion	5	5	0	3	1:35

FIG. 114

History of Pump Alarms KVO Alerts, and Resolutions (by Alarm/KVO Alert Code) Run Period: From 8/14/2003 12:00:00AM to 3/1/2004 12:00:00AM

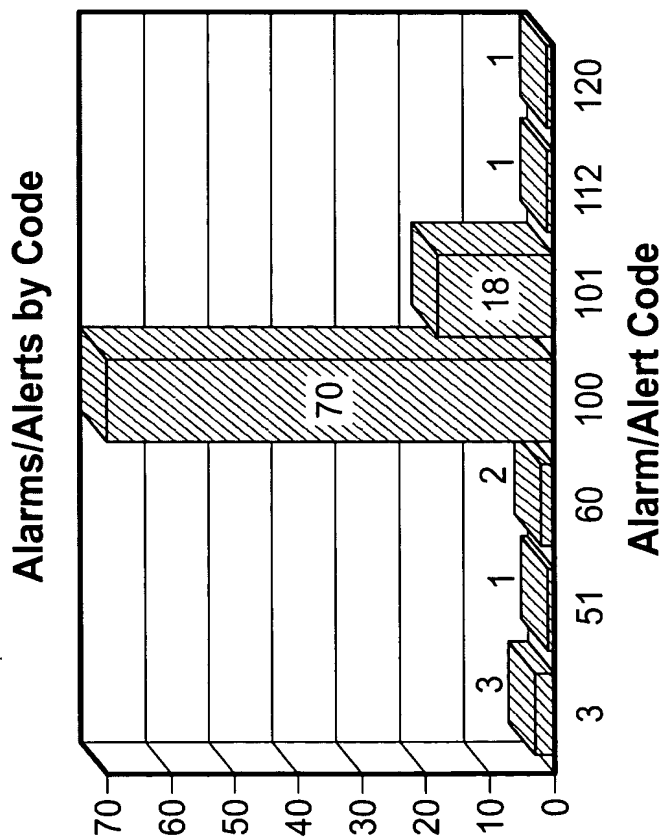


FIG. 115A

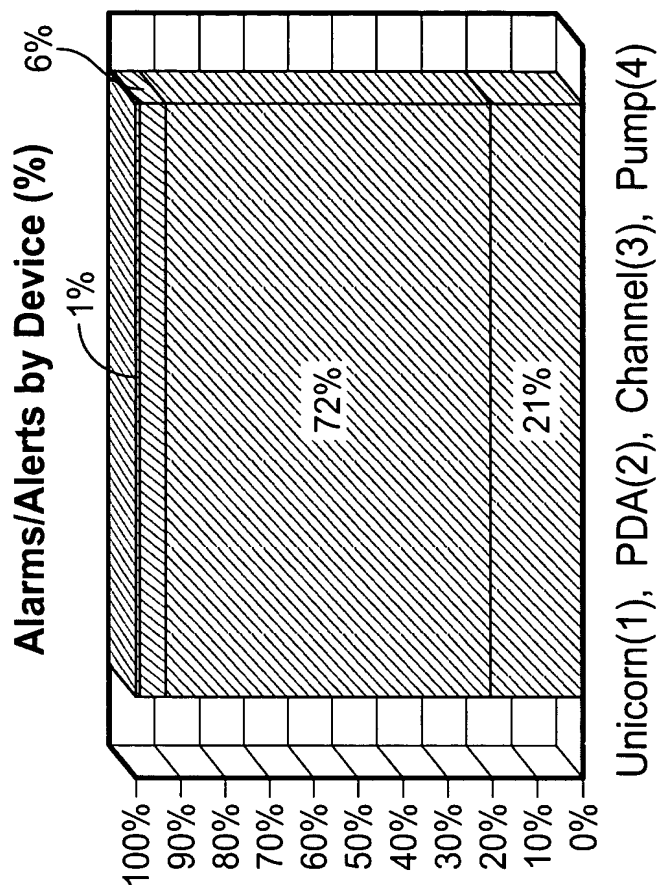


FIG. 115B

Code	Alarm Description
3	Channel Stopped Alert
51	Tube Not Loaded Alarm
60	Downstream Occlusion Alarm
100	PDA Loss of Communication
101	Unicorn Loss of Communication
112	Unicorn is initiating power-down
120	Pump Communication Lost Alarm

FIG. 116

Alarm, KVO Alert 3				Channel Stopped Alert	
Unit: *AUTROS DEMO UNIT*					
Patient Name AUTROS, Ptl					
Nurse: Nurse, Mary					
RX		Intermittent Infusion			
		Morphine Sulfate Inj 15 MG/ML			
		15 MG = 1 ML			
		Route: Injection Flow Rate: 1.5 ML/H			
		Estimated Administration Period: 40 Minutes			
		Every 1 Hour			
1	A00000085	Channel	Primary	9/26/2003	
RX		Continuous Infusion			
		*Multiple Vitamin Inj**			
		9999 ML			
		Route: Injection Flow Rate: 1200 ML/H			
		Estimated Administration Period: 5 Hours			
1	A00000047	Channel	Primary	1/23/2004 2:32:33PM	1/23/2004 2:32:50PM
1	A00000047	Channel	Primary	1/23/2004 2:33:48PM	
Total for Alarm, KVO Alert# 3		Channel Stopped Alert		3	
Alarm, KVO Alert 51		Tube Not Loaded Alarm			
Unit: *AUTROS DEMO UNIT*					
Patient Name AUTROS, Ptl					
Nurse: Tech, Cori					

FIG. 117

History of Alarms/Alerts and Resolutions (by Alarm/Alert)

Run Period: from 8/14/2003 12:00:00AM to 3/1/2004 12:00:00AM

Esc. Level	Source	Device	Mode	Occurrence Time	Cleared Time	Silenced Time
0	A00000047	RX	Continuous Infusion	1/23/2004 2:32:51PM	1/23/2004 2:32:52 PM	
			*Multiple Vitamin Inj**			
			9999 ML			
			Route: Injection Flow Rate: 1200 ML/H Estimated Administration Period: 5 Hours			
Total for Alarm, KVO Alert# 51						
Tube Not Loaded Alarm						
1						

Tube Not Loaded Alarm

FIG. 118

Code	Alarm Description
3	Channel Stopped Alert
51	Tube Not Loaded Alarm
60	Downstream Occlusion Alarm
100	PDA Loss of Communication
101	Unicorn Loss of Communication
112	Unicorn is initiating power-down
120	Pump Communication Lost Alarm

FIG. 120

History of Pump Alarms KVO Alerts, and Resolutions (by Cleared/Silence Time)
Run Period: From 8/14/2003 12:00:00AM to 3/1/2004 12:00:00AM

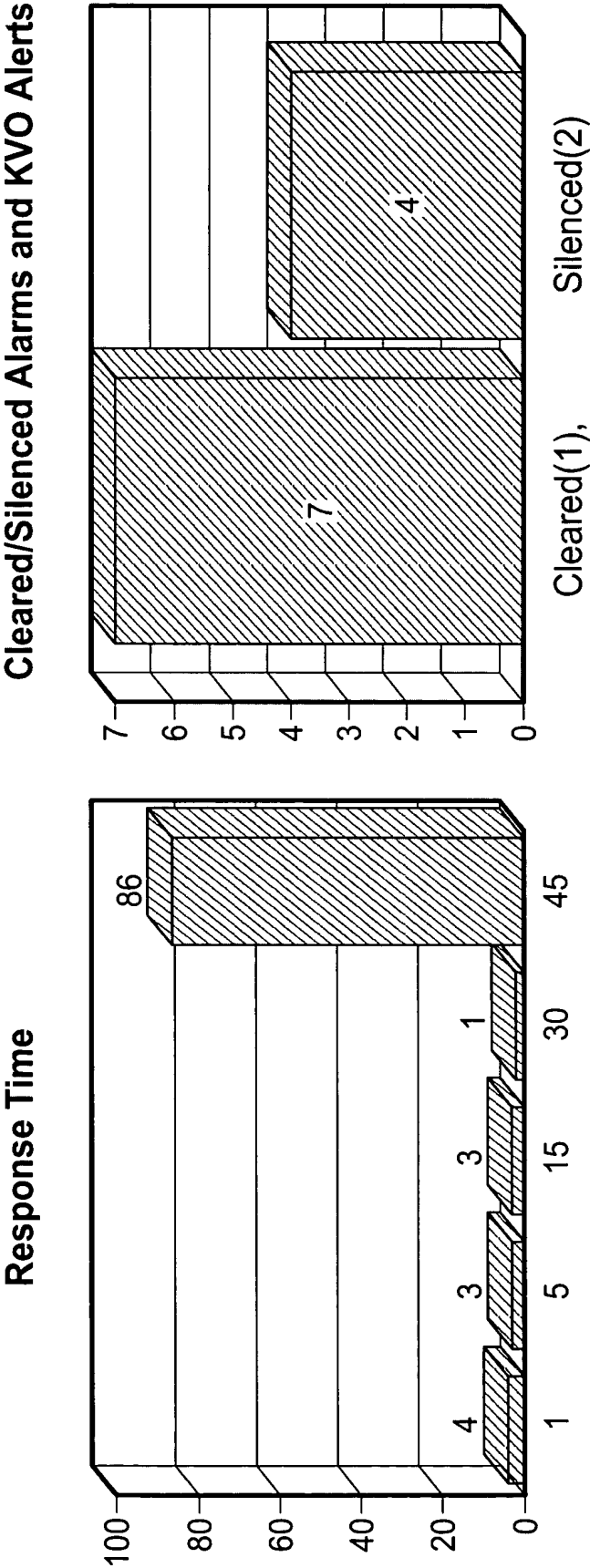


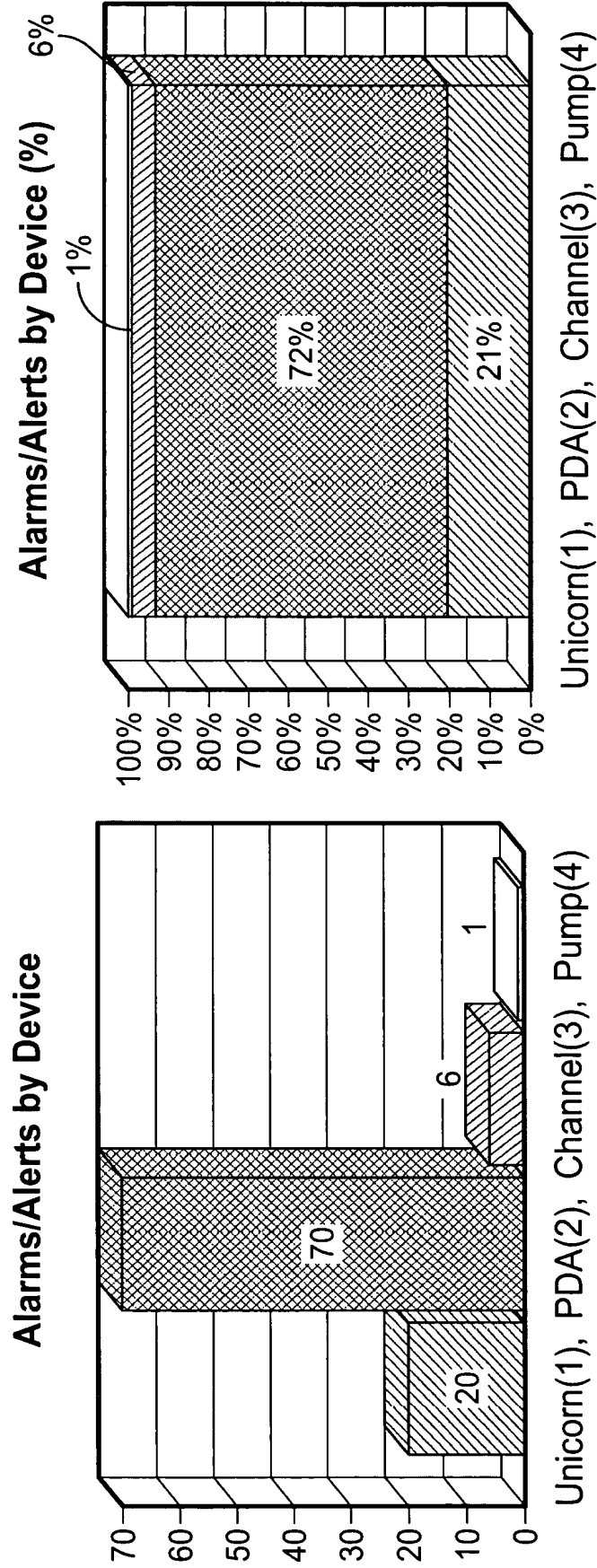
FIG. 119B

FIG. 119A

Esc. Level	Source	Device	Mode	Occurrence	Cleared	Silenced
Clearance/Silenced time up to: 1(min.)						
Unit: *AUTROS DEMO UNIT*						
Patient Name AUTROS, Ptl						
Nurse: Nurse, Mary						
RX Intermittent Infusion Morphine Sulfate Inj 15 MG/ML 15 MG = 1 ML Route: Injection Flow Rate: 1.5 ML/H Estimated Administration Period: 40 Minutes Every 1 Hour						
0	A00000085	Channel	Primary	9/26/2003 1:09:44PM		9/26/2003 1:09:50PM
1	A00000085	Channel	Primary	9/26/2003 12:17:51PM	9/26/2003 12:17:55PM	
RX Continuous Infusion *Multiple Vitamin Inj** 9999 ML Route: Injection Flow Rate: 1200 ML/H Estimated Administration Period: 5 Hours						
0	A00000047	Channel	Primary	1/23/2004 2:32:51PM	1/23/2004 2:32:52PM	
1	A00000047	Channel	Primary	1/23/2004 2:32:33PM		1/23/2004 2:32:50PM
Total Clearance/Silenced time up to: 1(min.) 4						
Clearance/Silenced time up to: 5 (min.)						
Unit:						
Patient Name						
Nurse:						
RX						
1	UnicomPE102	Unicom		2/12/2004 12:46:04PM	2/12/2004 12:48:04PM	
1	UnicomPE103	Unicom		2/12/2004 12:46:12PM	2/12/2004 12:50:12PM	
1	UnicomPE216	Unicom		2/12/2004 12:46:21PM		2/12/2004 12:50:21PM
Total Clearance/Silenced time up to: 5(min.) 3						

FIG. 121

History of Pump Alarms KVO Alerts, and Resolutions (by Unit)
Run Period: From 8/14/2003 12:00:00AM to 3/1/2004 12:00:00AM



Esc. Level	Source	Device	Mode	Occurrence Time	Cleared Time	Silenced Time
Unit: *AUTROS DEMO UNIT*						
Patient Name AUTROS, Pt1						
Nurse: Nurse, Mary						
RX Intermittent Infusion Morphine Sulfate Inj 15 MG/ML 15 MG = 1 ML Route: Injection Flow Rate: 1.5 ML/H Estimated Administration Period: 40 Minutes Every 1 Hour						
Alarm/Alert # 60 Downstream Occlusion Alarm						
0	A00000085	Channel	Primary	9/26/2003 1:09:44PM		9/26/2003 1:09:50PM
Alarm/Alert # 3 Channel Stopped Alert						
1	A00000085	Channel	Primary	9/26/2003		
Alarm/Alert # 60 Downstream Occlusion Alarm						
1	A00000085	Channel	Primary	9/26/2003 12:17:51PM	9/26/2003 12:17:55PM	
RX Continuous Infusion *Multiple Vitamin Inj** 9999 ML Route: Injection Flow Rate: 1200 ML/H Estimated Administration Period: 5 Hours						
Alarm/Alert # 51 Tube Not Loaded Alarm						
0	A00000047	Channel	Primary	1/23/2004 2:32:51PM	1/23/2004 2:32:52PM	
Alarm/Alert # 3 Channel Stopped Alert						
1	A00000047	Channel	Primary	1/23/2004 2:33:48PM		
Alarm/Alert # 3 Channel Stopped Alert						
1	A00000047	Channel	Primary	1/23/2004 2:32:33PM		1/23/2004 2:32:50PM
Unit:						
Patient Name						
Nurse:						
RX						
Alarm/Alert # 101 Unicorn Loss of Communication						
1	UNICORN1	Unicorn		8/28/2003		
Alarm/Alert # 101 Unicorn Loss of Communication						
1	UN	Unicorn		8/29/2003		
Alarm/Alert # 101 Unicorn Loss of Communication						
1	Unicorn1	Unicorn		2/12/2004 12:45:36PM		2/12/2004 12:50:36 PM
Alarm/Alert # 101 Unicorn Loss of Communication						
1	Unicorn1	Unicorn		2/12/2004 12:45:36PM		

FIG. 123

Colleague Alarms/Alerts Summary by Med All Units
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM

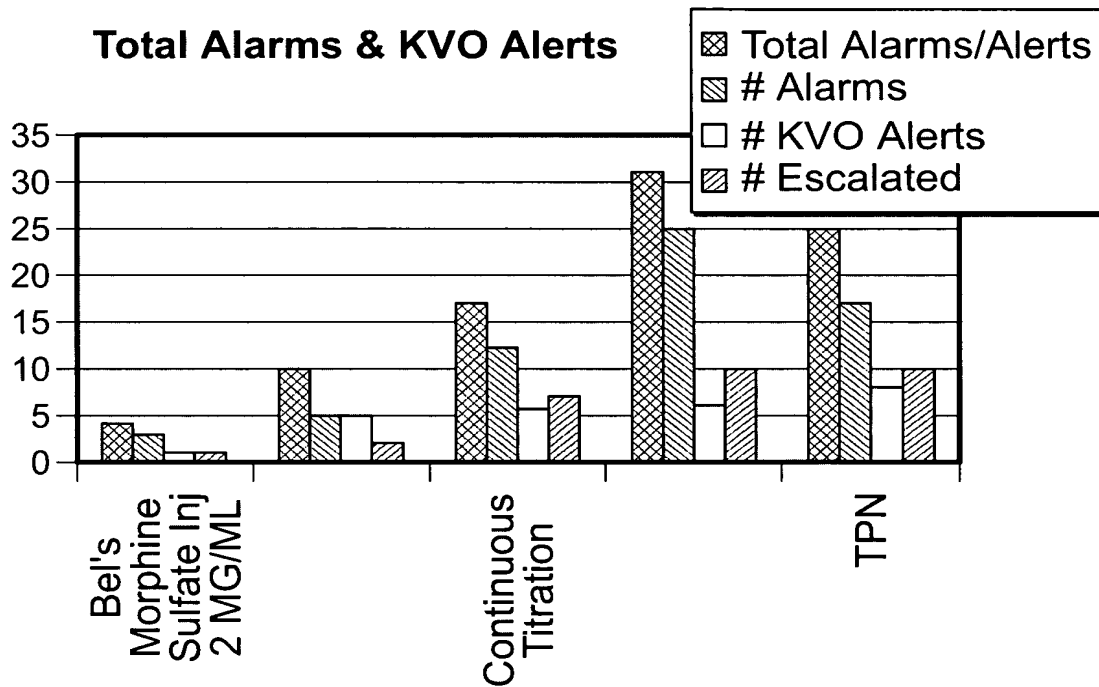


FIG. 124

All Units	Total	Total Infusions	Total Alarms/ Alerts	# Alarms	# KVO Alerts	# Escalated	Avg Time to Resolve (mm:ss)
	Total	50	87	62	25	30	3:22
	Bel's Morphine Sulfate Inj 2 MG/ML	3	4	3	1	1	1:15
	Multiple Vitamin Inj	10	10	5	5	2	2:30
	Continuous Titration	12	17	12	5	7	1:50
	Tapering	10	31	25	6	10	2:45
	TPN	15	25	17	8	10	2:13
	Total	30	40	28	12	20	4:15
BPCS Demo Unit	Bel's Morphine Sulfate Inj 2 MG/ML	3	4	3	1	1	1:15
	Multiple Vitamin Inj	7	4	1	3	1	1:20
	Continuous Titration	10	9	7	2	4	2:45
	Tapering	5	16	12	4	6	1:30
	TPN	5	7	5	2	8	1:10
	Total	20	47	34	13	10	2:30
BPCS Demo Unit2	Multiple Vitamin Inj	3	6	4	2	1	3:10
	Continuous Titration	2	8	5	3	3	1:12
	Tapering	5	15	13	2	4	2:15
	TPN	10	18	12	6	2	1:30

FIG. 125

Colleague Alarms/Alerts Summary by Med BPCS Demo Unit
Run Period: From 3/1/2004 12:00:00AM to
3/4/2004 12:00:00AM

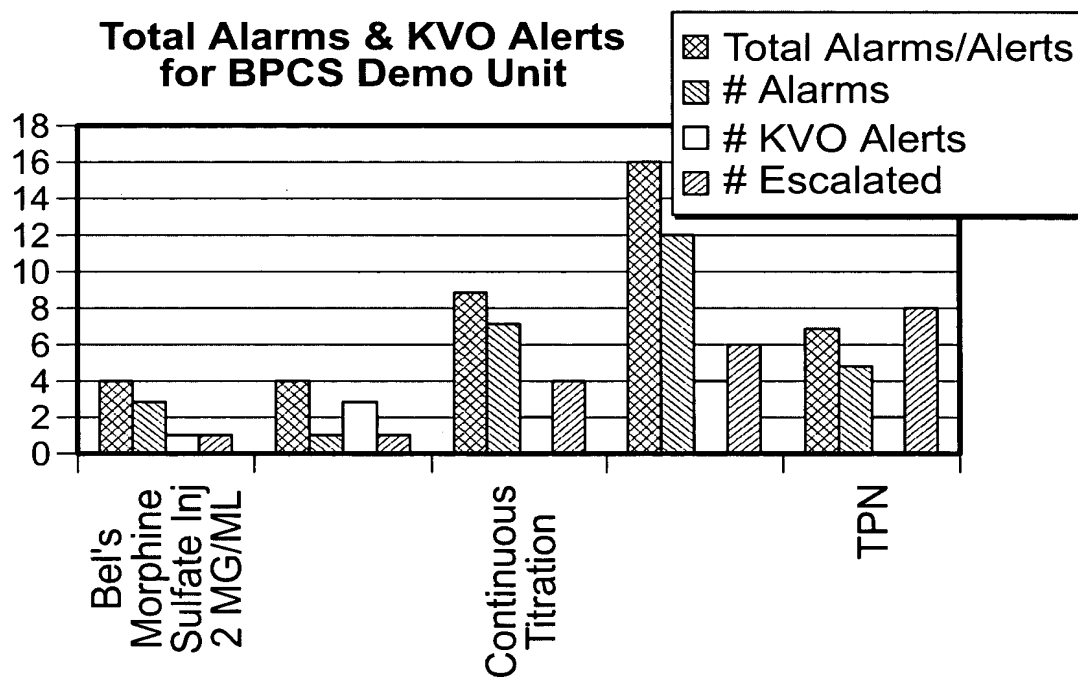


FIG. 126

	Total Infusions	Total Alarms/ Alerts	# Alarms	# KVO Alerts	# Escalated	Avg Time to Resolve (mm:ss)
Total	30	40	28	12	20	4:15
Bel's Morphine Sulfate Inj2 MG/ML	3	4	3	1	1	1:15
Multiple Vitamin Inj	7	4	1	3	1	1:20
Continuous Titration	10	9	7	2	4	2:45
Tapering	5	16	12	4	6	1:30
TPN	5	7	5	2	8	1:10

FIG. 127

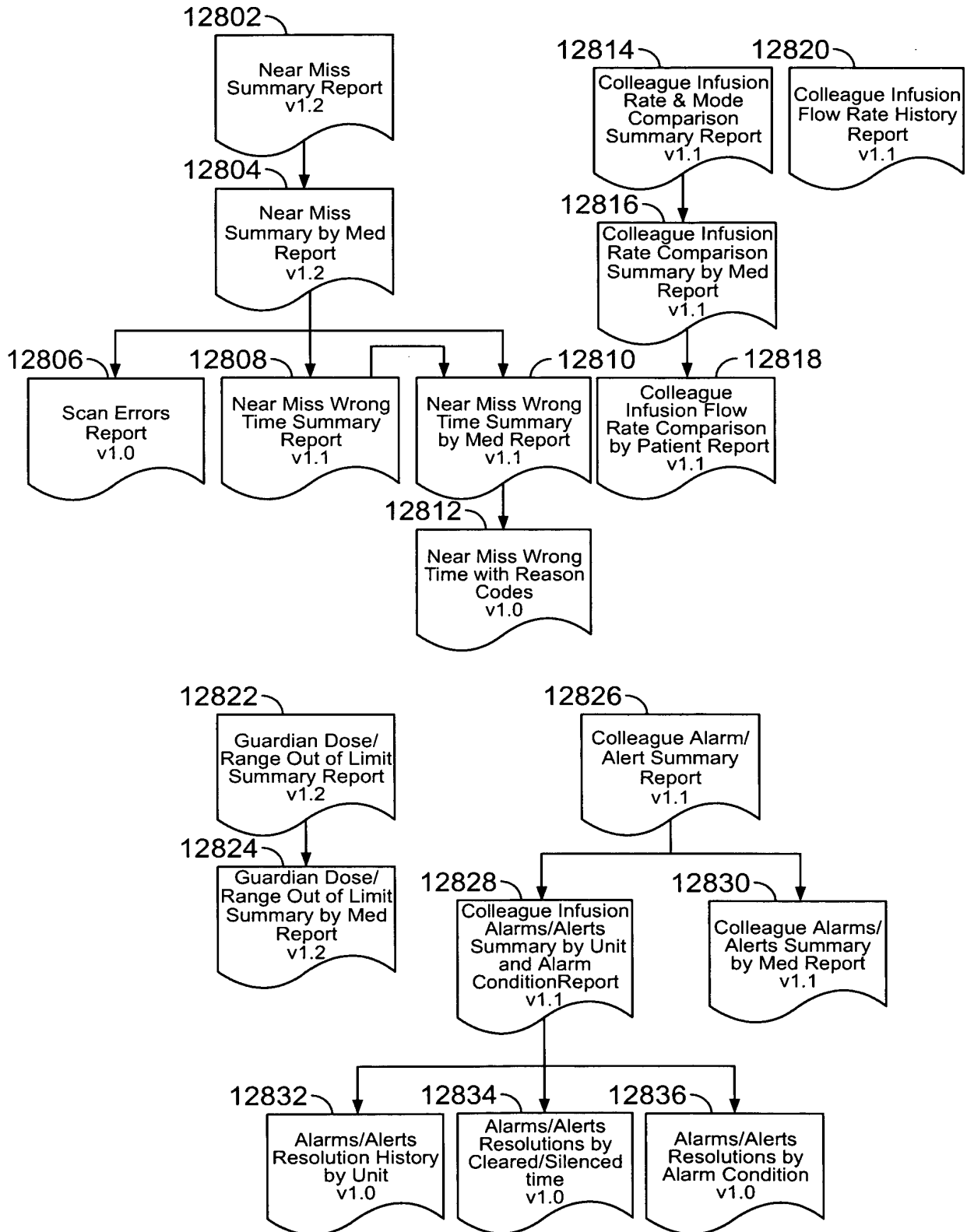


FIG. 128